

SECTION 1 PROJECT DESCRIPTION

1.0 General Description

This is a reimbursable agreement project (#AGL-407 A2) for the FAA to establish FOTS serving RTR 'S'. The City of Chicago Department of Aviation (CDA) hereafter known as the "sponsor" is presently constructing the RTR 'S' as well as clearing FOTS paths from the facility to the ATCT via Concourses "E and "G".. The specific items consist of, but are not limited to the following.

1.1 Scope of Work

The work includes but is not limited to:

1. Furnish and install four 1" diameter, yellow, smooth wall, high density polyethylene (HDPE) innerducts for outdoor FAA fiber optic cable compliant with and installed in accordance with OMP Specification L-110. However, the requirement in section 3.04H to clear and clean the ducts prior to installing innerducts is waived since it has been recently accomplished by the sponsor. The innerduct shall be installed in existing sponsor provided ductbank, manholes and handholes as shown on the contract drawings. Note, however, that the sponsor and not the contractor will provide innerduct in the ductbank segments between manhole EMH-711 and the E Concourse. The following L-110 specification requirements are highlighted but without relieving the contractor of the responsibility to comply with all applicable requirements:

a. Provide compression-type duct plugs and conduit seals as described in section 2.05E.

b. Compensate for innerduct elongation as described in section 3.04D.

2. Furnish and install four 1" diameter, yellow, corrugated wall, plenum rated, high density polyethylene (HDPE) innerducts for indoor FAA fiber optic cable compliant with and installed in accordance with OMP Specification L-110. These innerducts shall be installed between the E Concourse FAA telephone duct enclosure and the adjacent low voltage vault at the end of the E Concourse.

3. Furnish and install two fiber optic patch panels at RTR-S, one in each of the two FOTS junction boxes. The patch panels shall be Corning model WCH-06P Wall Mountable Closet Housings each equipped with six Corning CCH-CP-12-19T ST compatible closet connector housing panels.

4. Furnish and install the 12-strand, single mode, tight buffer indoor/outdoor, type B, fiber optic cables compliant with OMP Specification 16125 section 1.01C1 and the subsequent provisions in the specification for this cable type. The following cables shall be installed without splices in the contractor and sponsor provided innerducts as shown on the contract drawings between the RTR-S FOTS patch panels and the main ATCT FOTS patch panel in the second floor equipment room rack 3J:

- a. One cable between the RTR-S NW FOTS patch panel and the ATCT by way of the E Concourse.
- b. One cable between the RTR-S SW FOTS patch panel and the ATCT by way of the G Concourse.

The following OMP 16125 specification requirements are highlighted without relieving the contractor of the responsibility to comply with all applicable requirements:

- a. Section 3.01A for installing additional slack cable in each manhole and handhole per OMP Standard Detail 6-16-18, "handhole coiling detail" for single-mode fiber vertical coils.
- b. Sections 3.01C, 3.01D and the "FAA FOTS Single-Mode Fiber Optic Cable Specification Test Requirement Checklist" for cable testing and test documentation.
- c. Section 3.01F restricting installation during cold weather.

5. Terminate each fiber strand of every cable in the FOTS patch panel without using pigtail splices.

6. Install #14 AWG yellow insulated tracer wire in accordance with L-110 specification section 3.02B. The ability to trace the fiber optic cable path must be demonstrated by the contractor prior to FAA acceptance.

7. Complete the Manhole/Handhole Checklists per OMP specification L-118 after all construction tasks are completed.